DOCUMENT RESUME

ED 154 917 PS 009 931

AUTHOR Shantz, David W.; Schomer, Joyce
TITLE Interpersonal Conflict in Preschoolers: A Naturalistic Observation Study.
PUB DATE Apr 78
NOTE 19p.; Paper presented at the Biennial Southeastern Conference on Human Development (5th, Atlanta, Georgia, April 27-29, 1978)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Aggression; *Conflict; Dissent; *Interaction Process Analysis; Observation; *Peer Relationship; Play; *Preschool Children; Sex Differences; Social Adjustment; Success Factors; Videc Tape Recordings

ABSTRACT

This study of the behavior of a mixed group of male and female preschoolers in an indoor, free-play setting was designed to clarify two general issues: (1) the ratio of aggressive to non-aggressive disputes and the factors in the situation which may be associated with this relationship; and (2) the factors in the conflict episodes themselves which may be related to whether a participant wins or loses a dispute. Study subjects were five boys and five girls, aged 3-5 years, randomly selected from each of two groups of preschoolers. Each focal child was fitted with a wireless microphone and a continuous video-tape was made of the child's behavior, together with the behavior of all the children with whom the child interacted during a single 3-hour free-play session. The tapes were viewed to identify conflict episodes over territory, property, and interpersonal control. Any exhibition of aggressive behavior in conflict episodes was also noted. Results indicated that in a free-play setting with an equal number of boys and girls, the absolute number of aggressive conflicts did not vary significantly, but there were more non-aggressive conflicts between girl dyads and mixed pairs than between boy pairs. Territory disputes were found to be more aggression prone than either interpersonal control or possession disputes. There was no indication that the use of aggressive behavior, in and of itself, improved the preschooler's chance of winning a conflict. (CM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED154917

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Interpersonal Conflict in Preschoolers: A Naturalistic Observation Study*

David W. Shantz and Joyce Schomer

Oakland University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

David W. Shantz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

The study of aggression in children has been the subject of an enormous amount of laboratory-based research over the past few decades (Bandura 1973; Feshback, 1970). Although this work has touched on a wide variety of issues, much of it, perhaps due to the influence of social-learning theory, has been concerned with such topics as the effect contingent rewards and punishments have in changing levels of aggressive behavior and the influence of aggressive models. It is appropriate at this point, however, to give more attention to the role aggression plays in the naturally-occurring behavior of children, and to identify the situational contexts in which it occurs and the behavioral patterns and sequences in which it is embedded. This approach can not only assess the ecological or external validity of laboratory-based generalizations, but it can also generate data which may lead to the refinement and extension of current theories of aggression.

If one were to look at naturally-occurring behavior in order to observe high frequencies of aggressive encounters, where would one look? Some of the naturalistic observation studies of the 1930's and 1940's (Dawe, 1934; Green, 1933) suggest that much of the aggression exhibited by children occurs within the context of interpersonal conflicts. It seems reasonable to expect, then, that identification of the variables which influence the frequency and

PS 009931

*Paper presented at the Fifth Biennial Southeastern Conference on Human Development in Atlanta, GA, April 27-29, 1978.

nature of conflict should contribute a perspective to our understanding of aggression that is not addressed by current laboratory work in this area.

This study of the behavior of a mixed group of male and female preschoolers in an indoor, free-play setting was designed to clarify two general issues. The first concerns the ratio of aggressive to non-aggressive disputes, and the factors in the situation which may be associated with this relationship. The second issue involves the factors in the conflict episodes themselves which may be related to whether a participant wins or loses a dispute. We will defer discussion of the specific questions examined until later in the presentation when they can be discussed and integrated with relevant findings and their implications.

METHODS

The population of children whose behavior was sampled consisted of a morning and afternoon class of preschoolers. Both groups consisted of 18 children, evenly divided as to sex and race. In both groups, approximately 20% of the youngsters were from families belonging to the professional/managerial classes, while the rest were approximately evenly divided between those with working class backgrounds and those on some form of public assistance. The ages of the children in each group ranged from three to five years of age, with a mean for each group of four years.

The setting in which behavior was observed

The three-hour play sessions we observed were part of a regular nursery school program run by the School of Education of a large urban university. All sessions were supervised by a qualified teacher and three student teachers. The children played in a large playroom where they were free to choose from among a wide variety of activities and materials, with a minimum of adult supervision and intervention.

Sampling procedures

The children's behavior was sampled using the focal individual procedure described by Altmann (1974). That is, five boys and five girls were randomly selected from each of the morning and afternoon groups, and these ten boys and ten girls became the focal individuals. Each focal child, in random order, was fitted with a wireless microphone and a continuous video-tape was made of all their behavior, together with the behavior of all children with whom they interacted during a single three-hour play session. A total of 20 three-hour tapes were made over a 27-day period, and these tapes provided the raw data upon which our analyses are based.

Coding procedures

The first step in this process was to view the tapes and identify each conflict episode that occurred. A conflict was defined as one child resisting another child's influence attempt. A description of these conflicts was then written indicating whether the conflict was over territory, property, or interpersonal control, and whether it involved aggressive behavior. This description also indicated the identity of the participants, the winner and loser, the invader and defender, and the participants exhibiting aggressive behavior during the course of the fight. Rater reliability coefficients were calculated for each of these coding decisions and all were .80 or higher.

RESULTS

Factors affecting the ratio of aggressive to non-aggressive conflicts

A few moments ago I pointed out that our primary interest in studying conflict was for the light it might shed on aggressive behavior. Thus, our first questions involved the location of high densities of aggressive conflict.

Who do you watch, and where do you look if you want to observe conflicts which are most likely to include aggressive acts? In view of the frequent reports that boys behave more aggressively than girls (Bandura, Ross, & Ross, 1963; Hartup & Himeno, 1959; Moore, 1964) it seemed reasonable to see if the proportion of aggressive to non-aggressive fights varies as a function of the gender composition of the dyads. To answer this question, we took the 159 conflicts we had observed and placed them in a 3 x 2 contingency table defined by whether the conflict occurred in all-male, all-female, or mixed-sex dyad, and whether the conflict included any aggressive acts or not. A chi-square text of the frequencies in this table was significant at the $p < .05$ level ($\chi^2 = 7.83$; df = 2).

Insert Figure 1 about here.

As you can see in Figure 1, the ratio of aggressive to non-aggressive fights does indeed vary as a function of the type of dyad. The reason for this is that while the absolute number of aggressive conflicts did not vary significantly across the three types of dyads, all-girl and mixed-sex dyads participated in considerably more non-aggressive conflicts than did boy dyads. These data, then suggest that in a free-play setting that includes an equal number of boys and girls, one will see more conflicts by girl dyads and mixed-sex pairs than by boy pairs. At the same time, however, one can anticipate that male dyads will exhibit a higher proportion of aggressive disputes than will either of the other two types.

Since girl pairs contributed as many aggressive conflicts as male dyads, and certainly participated in more non-aggressive conflicts, what is one to make of the reputation boys have for being more aggressive and quarrelsome than girls (Dawe, 1934; Green, 1933; Jersild & Markey, 1935)? Two methodological factors may account for this apparent discrepancy. First, it should be noted

it is in studies involving rating scales and experimental tasks that have consistently indicated boys are more aggressive than girls(Bandura, Ross, & Ross, 1963; Hartup & Himeno, 1959; Moore, 1964). Studies based on directly observing naturally-occurring behavior, however, give more mixed results. While many of these kinds of studies also suggest boys are both more aggressive and quarrelsome than girls (e.g., Dawe 1934; Green, 1933), a sizable number find no sex differences (e.g., McKee & Leader, 1955; Muste & Sharpe, 1947). Almost all of these observational studies were done prior to the development of video-tape equipment. Thus earlier observers could code only those conflicts and behaviors which caught their attention at the time the group was observed. We, on the other hand, were able to review the taped interactions many times, and so were able to record many events that were extremely fleeting and non-obvious--the kinds of events that easily could be missed by observers having only one chance at identifying them. Thus, one major possibility that accounts for the discrepancy between these and earlier findings is the more sensitive observational procedures used here--procedures which may have picked up subtle conflicts in the all-girl interactions that were missed by earlier workers.

A second factor may contribute to the fact that we did not find boys to exhibit significantly more aggressive behavior than girls. Our coding procedures included only those acts of aggression that occurred during the course of conflict episodes. We did not include random, unprovoked aggressive acts occurring outside ongoing disputes, nor did we include instances of the kinds of rough-and-tumble aggression described by Blurton-Jones (1972). If we had, as earlier studies probably did, we too may have found boys to be more aggressive than girls.

One final point before turning to the next major question. The 159 conflicts were exhibited by 20 different male dyads, 34 different girl dyads,

and 39 mixed-sex dyads. Thus the average dyad exhibiting conflict participated in 1.7 conflict episodes with a range from 1 to 4 conflicts. Since we included all of these conflicts in our chi-square analysis, we clearly violated the assumption that all entries in the contingency table are independent of one another. To see if this violation were severe enough to affect the outcome of our test, we repeated the analysis using only one randomly selected conflict per dyad. The results were again significant at the $p < .05$ level, and, as you can see in Figure 2, the pattern of frequencies remains essentially unchanged.

Insert Figure 2 about here.

Our second major question was whether the ratio of aggressive to non-aggressive disputes varies depending on whether the conflict is over the use of space, versus the use of a particular object, versus the issue of interpersonal control (a set of categories which included all but 6 of the 159 conflicts we observed). We again placed all relevant conflict episodes (N=153) into a 3 x 2 contingency table and computed a chi-square which was significant at the $p < .05$ level ($\chi^2 = 7.21$, df = 2). The comparable analysis using only one randomly selected conflict per dyad yielded a similar pattern of frequencies. Since this table was significant at the $p < .10$ level, however, we can't be as confident of the reliability of this pattern as we would like.

Insert Figures 3 and 4 about here.

As you can see in Figures 3 and 4, the significance of this pattern is due to the fact that although space disputes are few and far between, when they do occur they are as likely as not to involve aggression. The more frequent possession and interpersonal control disputes, on the other hand, are much more likely to be resolved without the use of aggression.

Since 85% of the aggressive behavior we observed consisted of physical aggression or physical threat gestures, it is quite possible the aggression-proneness of territory disputes is related to their greater propensity for eliciting physical aggression than to either interpersonal-control or possession disputes. In territory conflicts, the children's attention is directly focused on getting the other child to move his or her body. This, together with the fact that the body in question is invariably within arms reach, makes it likely it will occur to one child to push, pull, or hit the other in order to achieve one's goal. In neither of the other two types of conflict, however, is the relationship between physical aggression and getting to the goal quite this direct and obvious. In the case of interpersonal-control disputes, for example, the other child is more likely to be a few feet away. Thus the use of physical aggression would require approaching the other before letting the blow fly. In addition, hitting does not appear to be as directly related to getting the other to bring you a drink of water (a control dispute), as shoving is to getting him away from your place at the play table (a territory dispute). Similarly, in possession disputes, the focus is on getting or keeping an object. The children tend to look at the object, and try to grab or hold on to it. This often elicits pulling or tugging at the objects, but it does not necessarily lead to physical aggression like pushing, pulling, or hitting the other child. Our impression is that physical aggression, when it occurs in possession disputes, tends to happen primarily when one child holds the object in such a way that the other child is likely, inadvertently, to bump, shove, or touch him as he is trying to get his or her hands on the object. Additional data are of course needed to assess the validity of these hypotheses.

Factors affecting the winning and losing of disputes

Much of the current interest in studying naturally-occurring conflicts in groups of children has focused on whether or not a linear dominance hierarchy forms such that one child consistently wins over some children and consistently loses to others. Strayer and Strayer (1975) and others have reported that such hierarchies do, in fact, exist even in groups of preschoolers. We need to know more about how this happens. For example, do the eventual winners of fights tend to use different tactics during the course of the fight than the eventual losers? Perhaps aggression is a sufficiently potent tactic in and of itself that the child who uses it significantly enhances his or her chances of winning. Winning then serves to reinforce the use of this tactic, and it is employed again to good effect in subsequent encounters with the same, and perhaps other children. The aggressive child may thus ascend the dominance hierarchy as a function of willingness to use the potent weapon of aggression. There is, of course, considerable support for the assumption that winning with aggression increases the use of aggression, and that winning improves one's position in the dominance hierarchy. What is missing, however, is evidence that in natural settings the use of aggressive tactics does in fact increase the likelihood one will win the dispute. Thus our third major question is this: Are the winners of the fights more likely to have used aggressive or non-aggressive tactics during the course of conflict?

To answer this question, we identified all conflict episodes in which one of the participants behaved aggressively while the other had not. In 12 of these disputes, the winner was the aggressive child. In the remaining eight, the winner was the non-aggressive participant. This is not a significant difference. Thus, there is no indication that the use of aggressive behavior, in and of itself, improves a preschooler's chance of winning a conflict.

Apparently, aggression must interact with something else if it is to be a winning tactic. Perhaps, then, it is not the case that the aggressive child wins the fights and moves up in the dominance hierarchy. It may be that dominance is based on some unknown factor, and it is one's position in the hierarchy which interacts with the use of aggression to determine whether or not one wins disputes. In any event, additional investigation clearly is needed to determine the conditions under which the use of aggression enhances a child's chances of winning fights.

If aggression is not significantly associated with winning, what else in the situation might be? Our reading of the literature describing conflict in non-human species suggest that, for many of them, defenders have a clear edge over invaders, particularly in territory disputes. Accordingly, our last major question was this: Are the winners of fights more likely to be the defenders of space and possession, or the invaders who are trying to intrude into the space or take away the objects?

To answer this question we collected all non-aggressive conflicts in which invader/defender and winner/loser had been identified (N = 56). These were then put in a 3 x 2 contingency table defined by gender-composition of the dyad and whether the invader or defender had won. A chi-square analysis of this table was significant at the $p < .05$ level ($\chi^2 = 8.89$, df = 2), as was the comparable analysis using one randomly selected conflict per dyad ($\chi^2 = 8.74$, df = 2, $p < .05$).

Insert Figures 5 and 6 about here.

As you can see in Figure 6, defenders are much more likely to win disputes than invaders, but only in same-sex dyads. In mixed-sex dyads, invaders and defenders are equally likely to win. At this point we wondered if these results were due to the fact that a tendency for boys to win over

girls was overpowering the invader/defender effect in the mixed-sex pairs. When we checked the gender of winners in this group, however, we found that half were girls and half were boys (7 girl and 9 boy winners in the 16 mixed-sex disputes based on one randomly selected fight per dyad). It would appear that these preschool girls have not yet acquired a tendency to lose when engaged in conflict with boys!

Why do defenders have an edge over invaders, at least in same-sex pairs? That is not yet clear. In a couple of the conflicts, however, we noticed that when defenders said, "Get away. I was here first"! or "Let go! That's my toy'" the invader would submit. This occurred even in one case where the submitting invader had had a previous fight with the same defender five minutes earlier, and had knocked him to the floor and left him crying! As is so often the case with this kind of research, we again need a larger data base in order to clarify the mechanisms that are associated with this tendency for defenders to have an advantage over invaders in non-aggressive conflicts, and how it comes about that preschoolers use and tend to comply with the old adage that "Possession is nine-tenths of the law."

References

Altmann, J. Observational study of behavior: Sampling methods. Behavior, 1974, 49, 227-267.

Bandura, A. Aggression: A social learning analysis. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Bandura, A., Ross, D,, & Ross, S. Vicarious reinforcement and imitative learning. Journal of Abnormal and Social Psychology, 1963, 67, 601-607.

Blurton-Jones, N. Categories of child-child interaction. In Blurton-Jones, N. (Ed) Ethological studies of child behavior. Cambridge: Cambridge University Press, 1972.

Dawe, H. C. An analysis of two hundred quarrels of preshcool children. Child Development, 1934, 5, 137-178.

Feshbach, S. Aggression. In P. H. Mussen (Ed), Carmichaels' Handbook of Child Development, Vol. 2, New York: Wiley, 1970.

Green, E. H. Friendships and quarrels among preschool children. Child Development, 1933, 4, 237-252.

Hartup, W. & Himeno, Y. Social isolation versus interaction with adults in relation to aggression in preschool children. Journal of Abnormal and Social Psychology, 1959, 59, 17-22.

Jersild, A. T. & Markey, F. R. Conflict between preschool children. Child Development Monographs, 1935, 6, 56-68.

McKeey, J. & Leader, F. The relationship of socio-economic status and aggression to the competitive behavior of pre-school children. Child Development, 1955, 26, 135-142.

Moore, S. Displaced aggression in young children. Journal of Abnormal and Social Psychology, 1964, 68, 200-204.

Muste, M. J. & Sharpe, D. F. Some influential factors in the determination of aggressive behavior in preschool children. Child Development, 1947, 18, 11-28.

Strayer, F. F. & Strayer, J. An ethological analysis of dominance relationships among young children. Presented at the Society for Research in Cjild Development, Denver, Colorado, 1975.

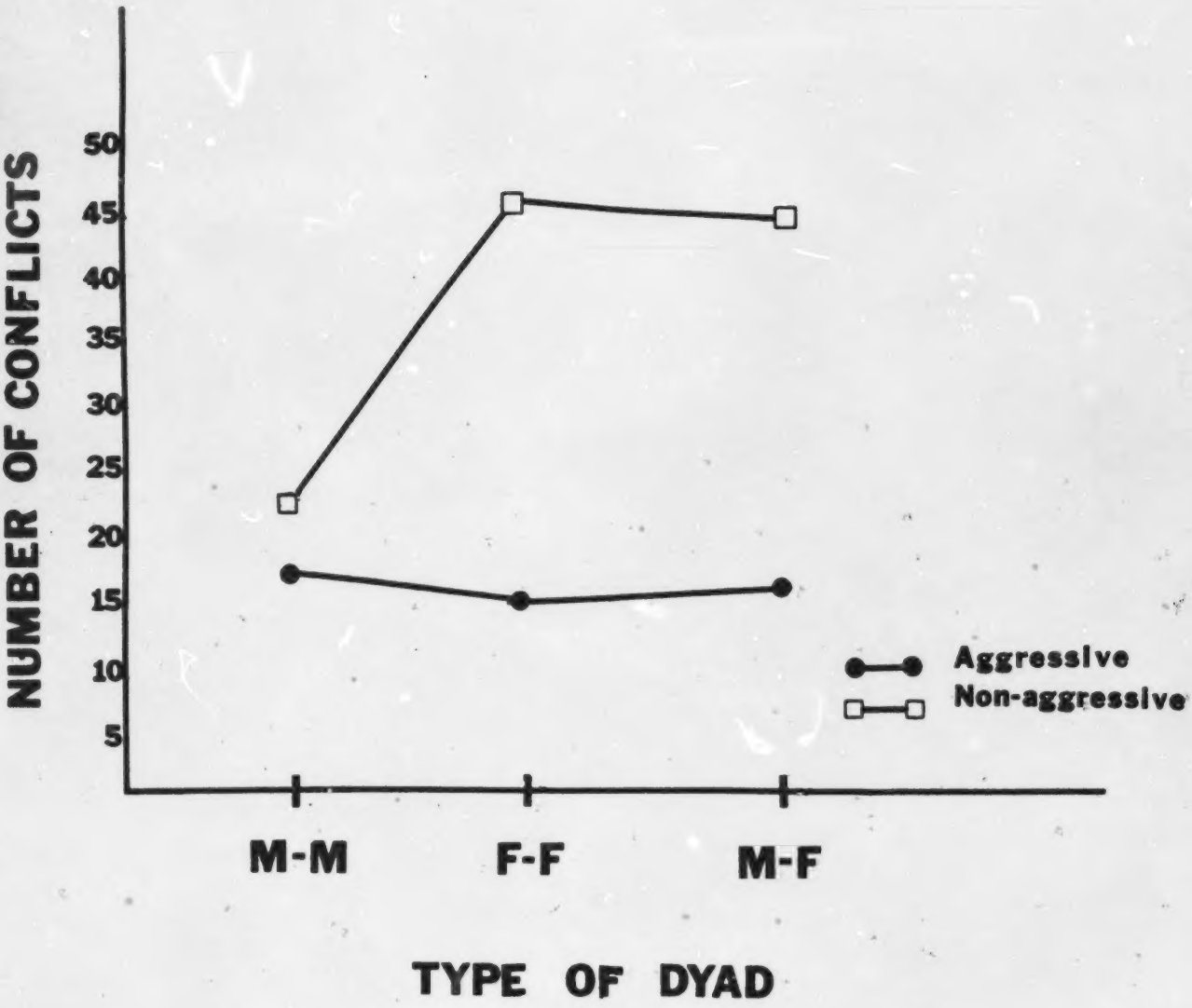

FIGURE 1. NUMBER OF AGGRESSIVE AND NON-AGGRESSIVE CONFLICTS AS A FUNCTION OF THE THREE TYPES OF DYADS. (BASED ON ALL CONFLICTS PER DYAD)

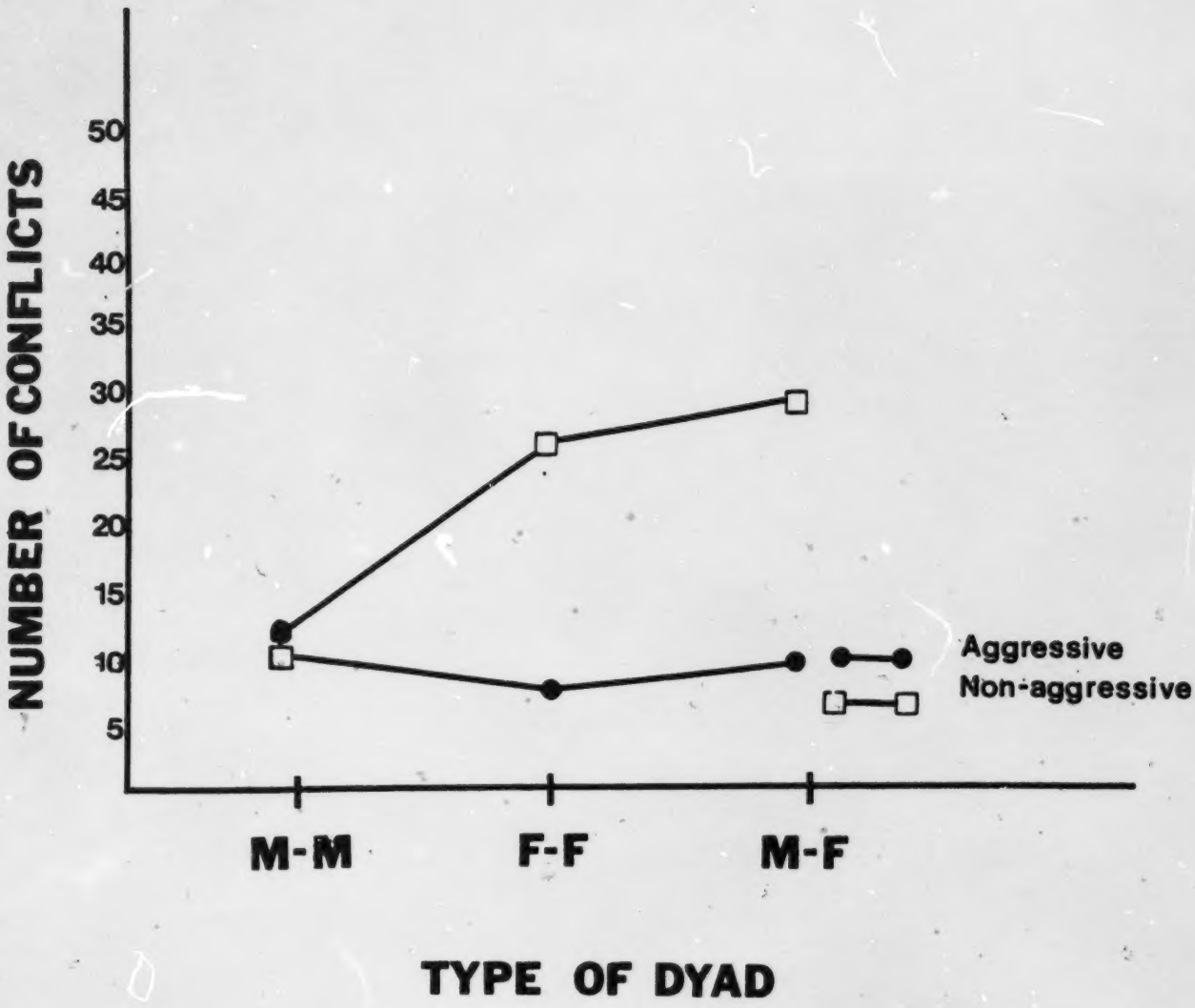

FIGURE 2. NUMBER OF AGGRESSIVE AND NON-AGGRESSIVE CONFLICTS AS A FUNCTION OF THE THREE TYPES OF DYADS. (BASED ON ONE RANDOMLY SELECTED CONFLICT PER DYAD)

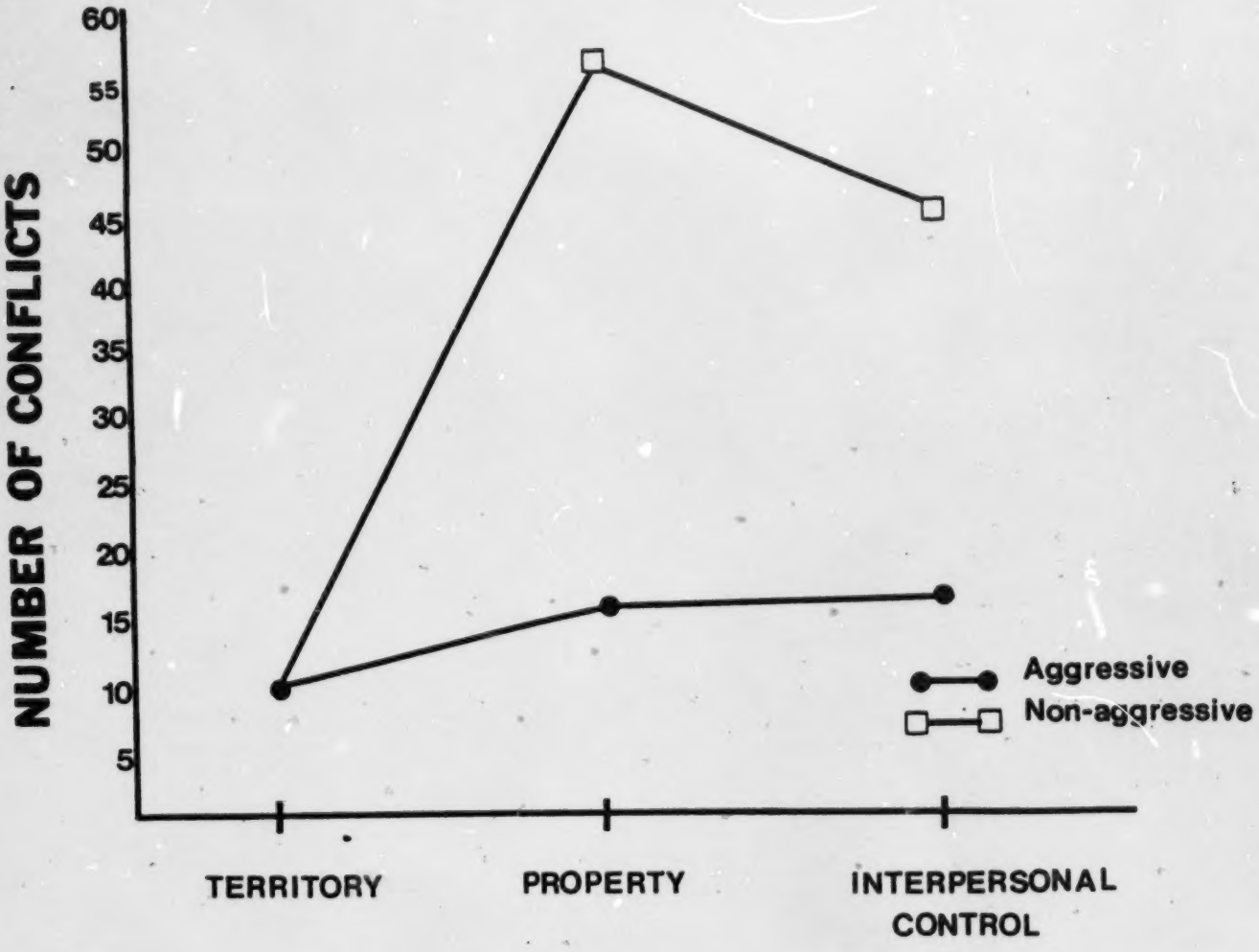

FIGURE 3. NUMBER OF AGGRESSIVE AND NON-AGGRESSIVE CONFLICTS FOR THREE TYPES OF CONFLICTS. (BASED ON ALL CONFLICTS PER DYAD)

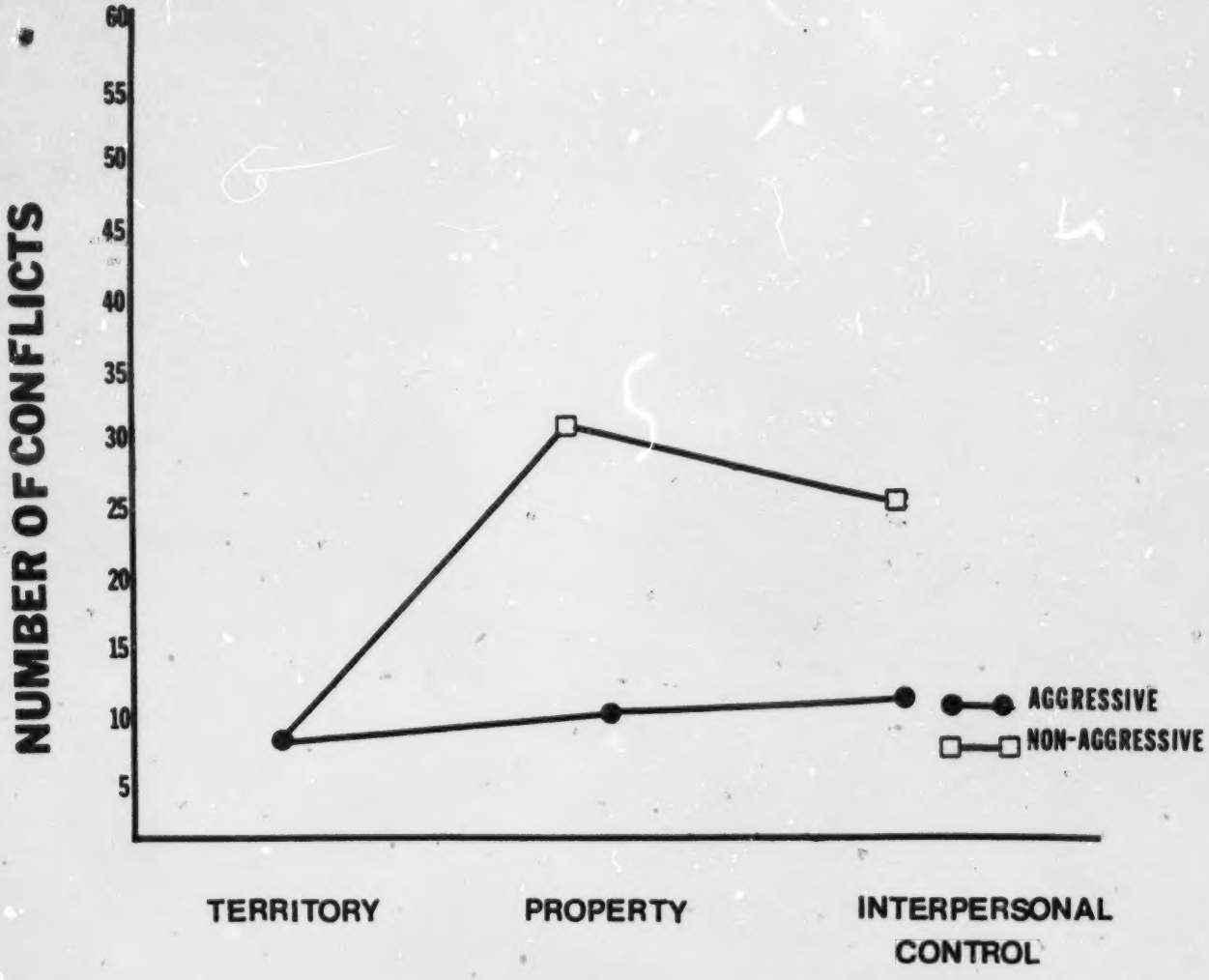

FIGURE 4. NUMBER OF AGGRESSIVE AND NON-AGGRESSIVE CONFLICTS FOR THREE TYPES OF CONFLICTS. (BASED ON ONE RANDOMLY SELECTED CONFLICT PER DYAD)

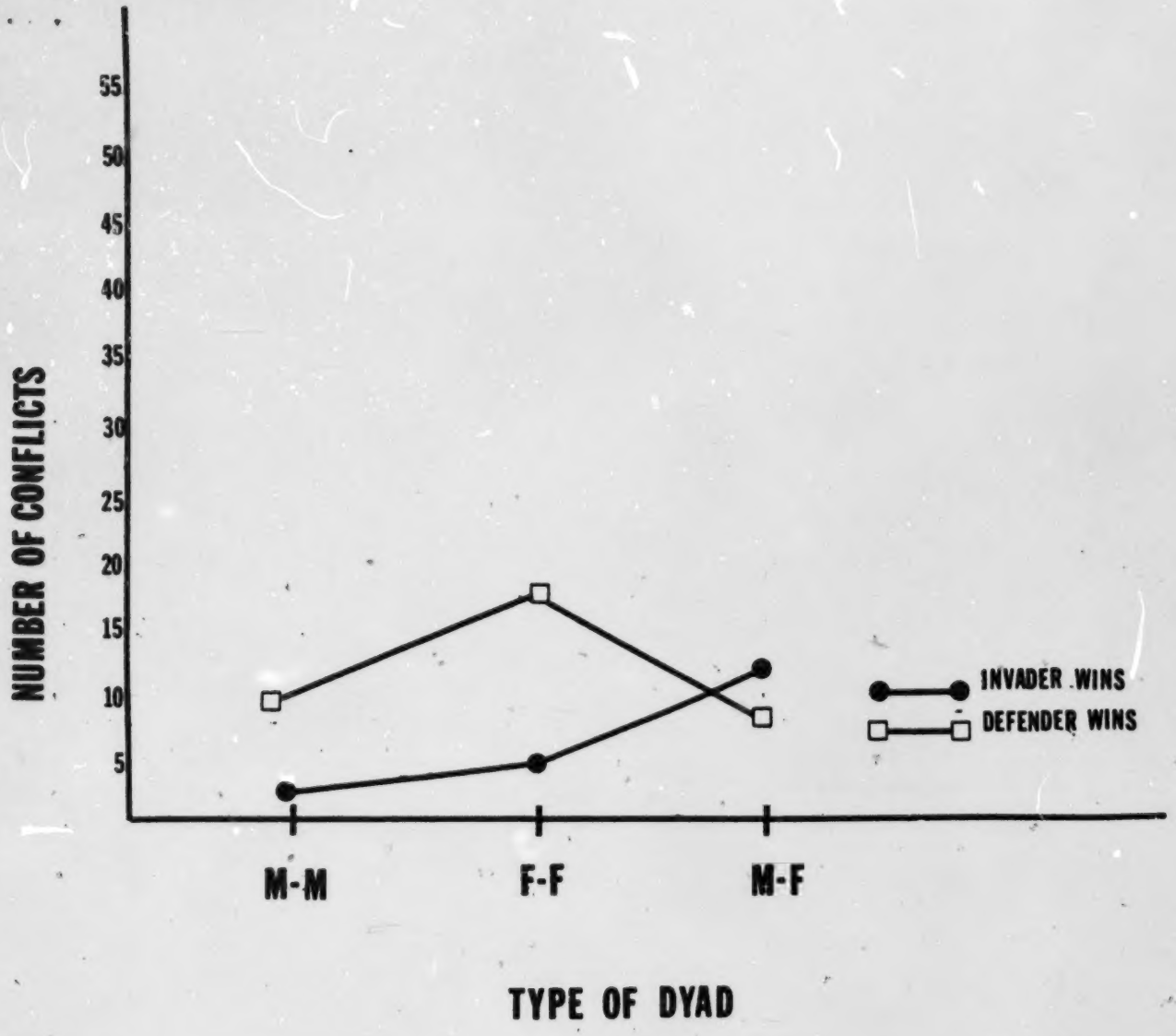

FIGURE 5. NUMBER OF CONFLICTS WON BY INVADERS AND DEFENDERS AS A FUNCTION OF THE TYPE OF DYAD. (BASED ON ALL NON-AGGRESSIVE CONFLICTS PER DYAD)

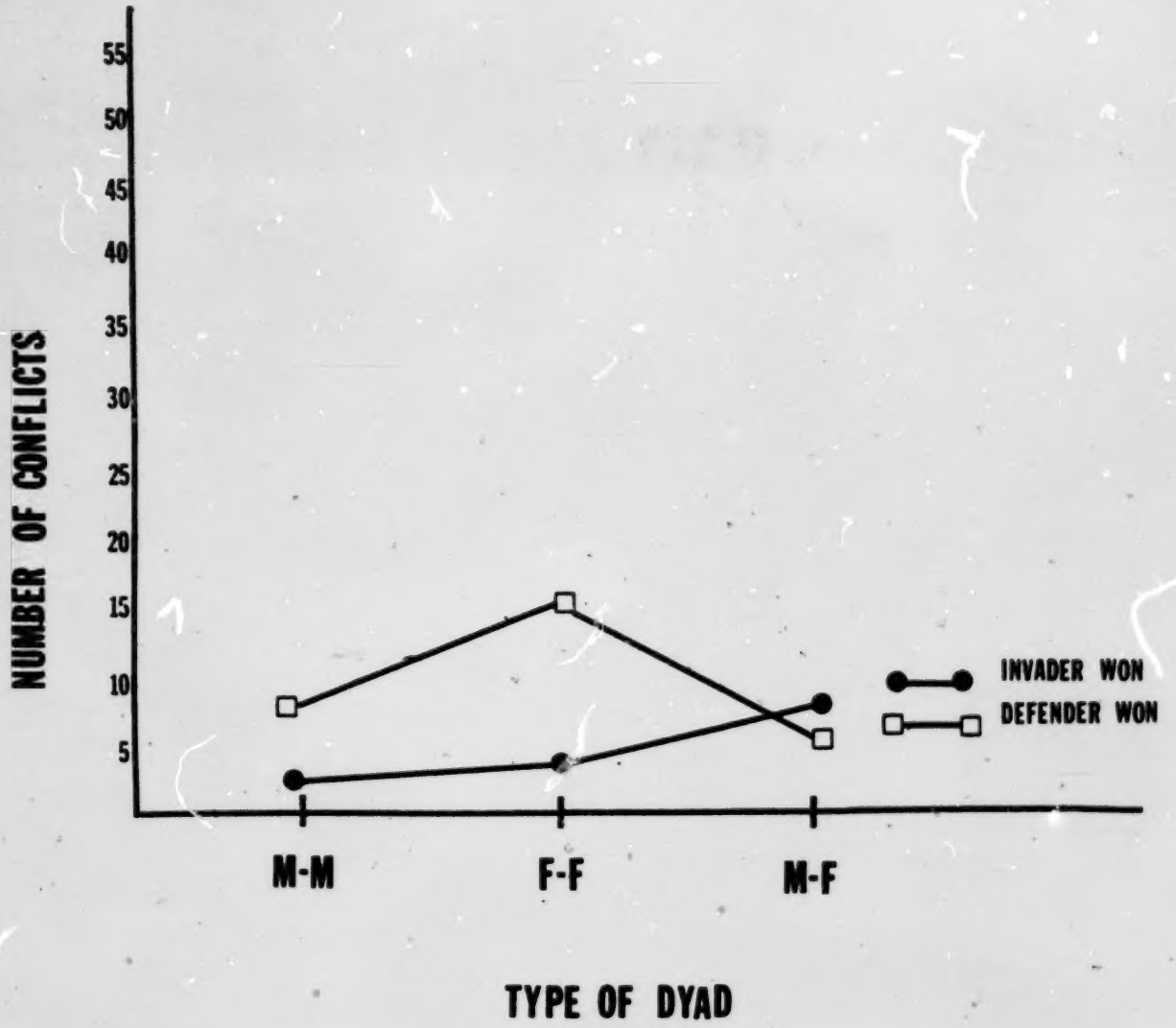

FIGURE 6. NUMBER OF CONFLICTS WON BY INVADERS AND DEFENDERS AS A FUNCTION OF THE TYPE OF DYAD. (BASED ON ONE RANDOMLY SELECTED NON-AGGRESSIVE CONFLICT PER DYAD)